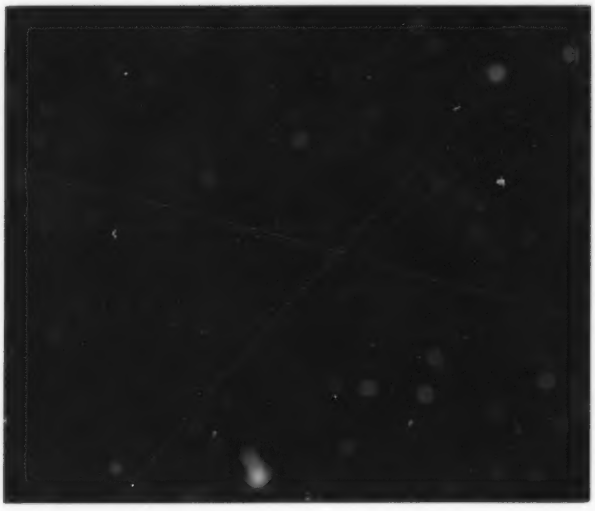
Province of British Columbia
Ministry of Finance and Corporate Relations



THE ECONOMIC IMPACT OF EXPO 86

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ECONOMIC IMPACT OF EXPO 86

Expo 86, the World Exposition on Transportation and Communications, was held from May 2 to October 13, 1986 on two downtown Vancouver sites totalling 173 acres. Initial attendance projections were surpassed by a wide margin as a total of 22.1 million visitors were attracted to the fair's 106 Canadian, international and corporate pavilions during Expo's six months of operation.

The fair attracted a large number of non-resident visitors to the Lower Mainland. Of those visiting the fair, 60 per cent were from outside British Columbia; of the British Columbian visitors, 25 per cent were from outside the Vancouver area.

Cost and Financing

An estimated $1.5 billion was spent on the fair's construction and operation. Expo 86 Corporation contributed $706 million, with the remaining costs borne by sponsors and participants. After revenues of $369 million, Expo 86 Corporation's deficit totalled $337 million, to be paid off with the profits from a major government-run lottery, Lotto 6/49. Most of this amount was paid off by March 31, 1987, with just $60.2 million remaining at that date. These cost figures include costs of demolition and site restoration.

Although attendance exceeded expectations, revenue was below budget, partially due to unexpectedly high numbers of season pass sales. Expo 86 Corporation met its deficit target by reducing expenditures.

Impact on the Economy

Prior to opening, Expo 86 provided economic stimulus through expenditures on planning, site preparation and construction. During the fair, economic benefits flowed from increased tourist spending and expanded employment, especially in the service industries.

Provincial tourism statistics give an indication of Expo's success in drawing tourists to British Columbia. Entries of United States residents staying for one or more nights increased 87.2 per cent in 1986 after an increase of only 7.2 per cent in 1985. Entries of overseas residents increased 48.4 per cent in 1986, following a decline of 5.2 per cent in 1985.

Spending on the Expo site totalled $486 million. Only an estimated 60 per cent of this expenditure represented a net addition to the provincial economy since many products sold at the fair were produced outside the province and a portion of spending by British Columbians would have been spent on other goods and services had the fair not taken place.

Tourists spent an additional $450 million off the fair site for food, lodging and general merchandise. The net benefit of these off-site expenditures, after accounting for spin-off effects, totalled $550 million.

The total impact of Expo's operating phase, including its indirect effects, was $840 million or 1.5 per cent of the provincial gross domestic product in 1986.

Regional Economic Impact

The benefits of Expo were concentrated in the Lower Mainland region and, to a lesser extent, on Vancouver Island. Vancouver retail sales jumped 12.3 per cent during Expo, while the rest of the province recorded an increase of 6.6 per cent. Provincial tax data confirm this pattern: hotel room and social service tax collections in the Lower Mainland increased 15.2 per cent, compared to a 12.9 per cent increase on Vancouver Island and lower increases in other regions.

Tourist spending generated by Expo 86 led to a significant increase in employment. During Expo the number of persons employed in the Lower Mainland increased by 53,500, or 7.6 per cent, including 29,000 jobs on the Expo site and numerous off-site jobs in the tourist industry.

Employment in the province as a whole increased during the same period by only 4.0 per cent, or 50,000 jobs, and some regions may have temporarily lost jobs as Expo 86 drew visitors away from traditional tourist destinations. However, these regions can expect to benefit in the future from increased international awareness of British Columbia as a tourist destination.

Regional Economic Indicators*

(May to October 1986 over May to October 1985)

	Lower Mainland	British Columbia
	percentage change	
Social Service Tax Collections	13.3	11.6
Hotel Room Tax Collections	111.6	62.9
Retail Sales	12.3	9.5
Employment	7.6	4.0

* Not seasonally adjusted.

Post-Expo Developments

With the closing of Expo 86, responsibility for the site's restoration and development passed to British Columbia Place Corporation and its successor, the B.C. Enterprise Corporation. Development of the site will take place over many years but is eventually expected to include a mix of residential, commercial and office space as well as large areas devoted to parks and public space. The development will also incorporate Expo 86 legacies such as the British Columbia Pavilion complex, the Expo Centre, the Round House, as well as the Vancouver Trade and Convention Centre on the Vancouver waterfront.

THE ECONOMIC IMPACT OF EXPO 86

From May 2 to October 13, 1986 British Columbia hosted Expo 86. Attendance at the fair totalled 22.1 million site visits, surpassing the initial attendance forecast of 13.75 million. These visitors were attracted to Expo by the 106 Canadian, international and corporate pavilions which filled the 173-acre downtown Vancouver site.

Expo 86 was expected to provide increased economic activity to the province as it continued its recovery from the 1981-82 recession. The expenditure of public funds and corporate investment in pavilions during the fair's construction and the inflow of tourist dollars during its six months of operations contributed to the growth in provincial Gross Domestic Product (GDP).

This note analyzes the increase in provincial GDP in 1986 as a result of the operating phase of the fair. Benefits accruing to the province from the fair's construction phase are not considered in this analysis.

A further analysis using regional tax, retail sales and employment data is presented in answer to concerns about the concentration of economic benefits from Expo 86 in the Lower Mainland region.

The Impact of Expo 86 on Provincial Gross Domestic Product

In 1983 the consulting firm Currie, Coopers and Lybrand released its assessment of the potential economic benefits resulting from Expo 86. That study, completed more than two years before the event, incorporated numerous assumptions and projections of key factors. Now, following the fair, it is possible to analyze its actual economic impact.

The purpose of Expo 86, apart from providing the province with international exposure, was to give a much needed boost to employment and economic activity by attracting a large inflow of tourist dollars. Available tourism statistics as well as financial data from the Expo 86 Corporation were used to determine the extent to which increased tourist expenditures raised the province's GDP.

The following analysis of tourist expenditures is divided into general off-site expenditures on food, lodging, transportation, etc. and spending on the fair site.

Off-site Expenditures

The increase in off-site tourist spending attributable to Expo is calculated by estimating the average tourist's per diem expenditure, average length of stay in British Columbia and the Expo induced increase in visitor-trips. Values for each of these were obtained by major area of tourist origin. These off-site expenditure estimates exclude on-site spending as they are based on tourist spending studies carried out in years prior to Expo 86. It is possible these off-site spending estimates are too high as a proportion of "normal" tourist spending may have been transferred to on-site purchases.

- Average per diem expenditure was calculated by inflating the Ministry of Tourism, Recreation and Culture's 1985 estimates using the percentage increase of appropriate components of the Vancouver Consumer Price Index for May to October 1986 over the same period in 1985.

- The average length of stay for each type of tourist is assumed to be the same as reported by the Ministry of Tourism in 1985.

- The Ministry of Tourism, Recreation and Culture provided estimates of tourist activity (visitor-trips) by major tourist origin from 1976 to 1986. Using visitor counts at the province's borders the ministry makes adjustments for such factors as United States and overseas visitors who enter British Columbia after beginning their vacations in another part of Canada.

- The average annual growth rate between 1976 and 1985 was calculated for each tourist market. This is assumed to represent the trend growth in visitor-trips. The growth attributable to Expo was determined by subtracting this trend growth rate from the annual growth rate recorded between 1985 and 1986. This Expo-related growth is used to calculate the incremental visitor-trips attributable to Expo. Other factors which may have contributed to the large increase in visitor-trips in 1986, such as the European terrorism scare, are not considered in this analysis.

Provincial Visitor Volumes

	1976	1985	1986	Average Annual Growth 1976-1985	Annual Growth 1985-1986
	-----thousands------			--------per cent--------	
B.C. Residents	5,660	5,600	6,243	-0.1	11.5
Other Canadians	2,010	3,190	3,510	5.3	10.0
U.S. Residents	2,050	3,180	4,670	5.0	46.9
Overseas	265	446	577	6.0	29.4
Total	9,985	12,416	15,000	2.5	20.8

Source: Ministry of Tourism, Recreation and Culture

. Tourists entering British Columbia for one day only are excluded from off-site expenditure estimates as their spending is assumed to be restricted to the fair site only.

The following table presents estimated tourist expenditures by tourist origin due to Expo 86. Expenditures by tourists off the fair site are estimated at $455 million.

Off-site Tourist Expenditures due to Expo 86

	Per Diem Expenditures (dollars)	Average Length of Stay (days)	Incremental Visitor-trips (thousands)	Increased Expenditures (millions of dollars)
B.C. residents	51.00	4.0	643.0	131
Other Canadians	35.87	6.8	151.8	37
U.S. (1 or more nights)	42.60	4.2	1,331.1	238
Overseas	46.52	10.0	104.5	49
				455

On-site Expenditures

On-site expenditure information provided by Expo 86 Corporation indicates $486 million was spent at Expo.

Expo 86 On-Site Expenditures
(millions of dollars)

Admission revenue	207
Gross food sales	167
Gross merchandise sales	98
Revenue from rides	14
	486

Source: Expo 86 Corporation's Financial Highlights

In calculating the contribution of Expo 86 to the economy, total on-site expenditures should be reduced to account for spending by British Columbia residents which would still have occurred had the fair not taken place. Only the portion of resident spending which was drawn from savings, or would otherwise have been spent outside the province, should be included. All expenditures by non-residents, on the other hand, are considered net injections to the provincial economy, although a portion of this spending may have been drawn from "normal" off-site tourist expenditures.

Surveys undertaken at the fair indicate 40 per cent of the visitors were from British Columbia and 75 per cent of these visitors were from the Vancouver area. The remaining 60 per cent were from outside the province.

It is assumed that 10 per cent of the spending by Vancouver area visitors and 50 per cent of the spending by other British Columbia visitors were net injections to the provincial economy. All expenditures by out-of-province visitors are considered injections.

This means $330 million of on-site spending is considered additional spending in the province. This is the "base case" scenario.

On-Site Visitor Spending

Visitor Origin	Share of Attendance (per cent)	Spending By Origin (000s)	Assumed Injection (per cent)	Net Injection (000s)
Vancouver	30	$146	10	$ 15
Rest of B.C.	10	$ 49	50	$ 24
Out-of-Province	60	$291	100	$291
		$486		$330

Multiplier Effects and Value Added

The expenditure estimates presented above give the initial injection of Expo 86 induced spending into the provincial economy. To obtain the net economic impact of these expenditures it is necessary to take into account the effect of spin-offs to other sectors of the provincial economy, which increases value-added, and the leakage of expenditures to other economies through, for example, the importation of goods and services, which reduces the value-added in British Columbia.

The multipliers used in the Currie, Coopers and Lybrand study, and again used here, were generated using the Ministry of Economic Development's input-output model of the British Columbia economy. The off-site value-added multiplier of 1.215 indicates that the $455 million of spending increased provincial GDP by $553 million. The corresponding on-site expenditure multiplier of 0.882 (lower because many products sold on-site were purchased from out-of-province suppliers) indicates on-site spending increased provincial GDP by $291 million.

As a result, the value-added due to Expo 86 is estimated to be $844 million. This means the expenditures induced by Expo 86 accounted for approximately 1.5 per cent of provincial GDP in 1986.

Sensitivity Analysis

The above conclusions are based on a variety of assumptions, of which the most tenuous are the different net effects of on-site spending by tourist origin. Since it is presently not possible to determine the actual net effect of on-site spending, it is necessary to alter the assumptions and determine the effect of these changes on our conclusions.

- In a "worst case" scenario the on-site spending by British Columbian visitors would be drawn completely from other in-province expenditures and would not represent any incremental value-added. Furthermore, out-of-province tourist expenditures could, to some degree, have been taken from "normal" off-site spending. In this case it is assumed 90 per cent of out-of-province spending is an injection. With these assumptions Expo 86 was responsible for 1.4 per cent of 1986 GDP.

- In a "best case" scenario a larger proportion of spending by British Columbian visitors would have been drawn from their savings and/or from spending which would otherwise have occurred outside the province (ie. they stayed for Expo rather than vacationed in Mexico). In this case it is assumed 30 per cent of the spending by Vancouver visitors is value-added while 70 per cent of the spending by other British Columbians represents value-added to the economy. Once again all spending by out-of-province visitors would be a net injection. These assumptions result in Expo contributing approximately 1.6 per cent of the GDP for 1986.

Sensitivity of Value-Added to On-Site Spending Assumptions

	-----Per Cent Injection of Spending-----		
	Worst Case	Base Case	Best Case
Visitor Origin			
Vancouver	0	10	30
Rest of B.C.	0	50	70
Out-of-Province	90	100	100
Economic Impact			
Value-Added (millions)	$784	$844	$878
Per Cent of 1986 GDP	1.4	1.5	1.6

Cost and Financing

An estimated $1.5 billion was spent on the fair's construction and operation. Expo 86 Corporation contributed $706 million, with the remaining costs borne by sponsors and participants. After revenues of $369 million, Expo 86 Corporation's deficit totalled $337 million, to be paid off with revenues from Lotto 6/49. Most of this amount was paid off by March 31, 1987, with just $60.2 million remaining at that date. These figures include costs of demolition and site restoration.

Although attendance exceeded expectations, revenue was below budget, partially due to unexpectedly high numbers of season pass sales. Expo 86 Corporation met its deficit target by reducing expenditures.

Overall Impact

Expo 86 was the biggest event ever staged in British Columbia. The analysis presented above has shown that Expo made significant contributions to the province during its operation including:

- bringing together over one hundred Canadian and international participants and attracting over 22 million site visits;
- attracting over 1.5 million additional out-of-province tourists to British Columbia in 1986;
- accounting for between 1.4 per cent and 1.6 per cent of the provincial GDP in 1986; and
- increasing international awareness of British Columbia as a tourist destination.

Regional Impact of Expo 86

There has been concern raised that the economic benefits of Expo 86 were restricted to the Lower Mainland region. To address this concern regional tax, retail sales and employment data for the May through October periods of 1985 and 1986 are presented.

Although the data are not directly comparable, due to differing regional specifications, a comparison of the economic impact of Expo 86 in the Lower Mainland region, vis-à-vis the rest of the province, is possible.

Regional Tax Collections

The following table presents data on social service and hotel tax collections for each of six regions in British Columbia. As expected, the Lower Mainland and Vancouver Island regions recorded the largest increases in consumer tax revenues during Expo 86.

Percentage Increase in Social Service and Hotel Tax Revenues
(May-October 1985 to May-October 1986)*

	Total	Hotel Tax	Social Service Tax
Vancouver Island	12.9	23.4	12.3
Lower Mainland/Sunshine Coast	15.2	111.6	13.3
Kamloops, Williams Lake and Cariboo	5.2	24.6	4.1
Penticton, Vernon, Okanagan	8.8	18.0	8.2
Nelson, Cranbrook, East Kootenay	-3.2	10.1	-4.3
Prince George, Prince Rupert and North	3.6	1.5	3.6
British Columbia	13.2	62.9	11.6

*Excludes tax collected by out-of-province vendors.

The hotel tax collections, which may be a better indicator of tourist activity, show a large increase in the Lower Mainland during the Expo period. This is the result of increased occupancy rates and significant price increases over 1985.

These figures show that the main beneficiaries of Expo-related tourism were Lower Mainland communities and, to a lesser extent, Vancouver Island, Kamloops/Williams Lake/Cariboo and the Okanagan.

One curious result is the 4.3 per cent decline in social service tax revenue and the 10.1 per cent increase in hotel tax revenue in the East Kootenay region. This might be the result of a slump in consumer expenditures by local residents caused by layoffs and labour disputes that affected one of the region's main industries, coal production. In addition, tourism expenditures were probably higher in 1986 because of the extensive forest fires that swept the East Kootenay region in 1985.

Retail Sales

Retail sales data give an indication of Expo's effect on both taxable and non-taxable expenditures. Statistics Canada provides data only for Vancouver and the province as a whole.

Retail Sales
(May to October Totals)*

	1985	1986	Per cent Change
	(millions of dollars)		
Vancouver	3,641.1	4,090.2	12.3
Rest of Province	3,694.1	3,939.3	6.6
British Columbia	7,335.2	8,029.4	9.5

*Not seasonally-adjusted.

The 12.3 per cent increase in Vancouver retail sales is nearly twice the average increase of 6.6 per cent for the rest of the province.

Regional Employment and Unemployment

The following table presents data on the employment levels and unemployment rates for each of eight regions in British Columbia. The data are not seasonally-adjusted.

Employment and Unemployment Rates
(May to October Averages)*

	Employment			Unemployment Rate		
	1985	1986	Per cent Change	1985	1986	Change
	-(thousands)-			——(per cent)——		
East Kootenay	26.2	25.2	-3.8	12.5	13.5	1.0
Central Kootenay	35.5	37.3	5.1	19.3	15.3	-4.0
Okanagan-Boundary	95.3	93.0	-2.4	12.6	15.1	2.5
Thompson-Nicola	48.5	47.5	-2.1	14.6	15.1	0.5
Lower Mainland	705.0	758.5	7.6	12.4	10.9	-1.5
Vancouver Island	209.2	204.3	-2.3	14.5	12.9	-1.6
Cariboo-Prince George	81.2	82.7	1.8	14.6	13.3	-1.3
North Coast-Peace River	52.2	55.2	5.7	14.0	12.8	-1.2
British Columbia	1,253.0	1,303.0	4.0	13.3	11.7	-1.6

*Not seasonally-adjusted.

During the six months of Expo 86 the number of employed in the Lower Mainland increased 7.6 per cent or by 53,500 over the same period in 1985. This increase in employment can be attributed to the 29,000 jobs created on the Expo site and the numerous off-site jobs created in the tourist industry.

Employment increases were also recorded in the Central Kootenay, North Coast-Peace River and Cariboo-Prince George regions, but to a lesser degree than in the Lower Mainland. All other regions experienced decreases in employment.

Unemployment data show somewhat different results. Although the Lower Mainland's unemployment rate fell by 1.5 per cent, both the Vancouver Island and Central Kootenay regions experienced larger declines.

The fact that Vancouver Island's unemployment rate fell at a time of falling employment reflects an even larger decline in the region's labour force. Perhaps many of the region's unemployed left for the Lower Mainland to take advantage of Expo related job opportunities.

In three of the eight regions the unemployment rate during Expo was higher than the rate in the same period of 1985.

Conclusion

By analyzing available tourist expenditure data it was found that Expo 86 made a significant contribution to the provincial economy during its six months of operation. Regional economic data show that these benefits were for the most part restricted to the Lower Mainland region. However, other areas of the province may benefit from the increased awareness of British Columbia as a tourist destination.

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